



KS4 Learning Overview

Biology

Exam Board: AQA

Year 11		
Term	Topics	Extra learning opportunities
Autumn 1&2	Inheritance, variation and evolution	<p>Students could visit the Natural History Museum and search for examples of natural selection: Why did the animals/plants on display develop the adaptations they have?</p> <p>There is a particularly impressive gallery on human evolution - https://www.nhm.ac.uk/visit/galleries-and-museum-map/human-evolution.html</p> <p>Students with an interest in domesticated animals (dogs, cats, horses, cows) could research how, and why, specific breeds were created – e.g. Yorkshire Terriers. Students could look into the origin of cattle - https://www.ucl.ac.uk/news/2012/mar/dna-traces-cattle-back-small-herd-domesticated-around-10500-years-ago</p>
Spring 1&2	Ecology	<p>Students could use the “sampling” techniques they are taught for Required Practical 7 (p.179 of this spec: https://filestore.aqa.org.uk/resources/science/specifications/AQA-8464-SP-2016.PDF) to estimate the population of any organism in a certain area (the number of daisies in a park; number of snails on a path; number of ants on a patio).</p> <p>Using what they learn about the Water Cycle in Lesson 10 of Ecology, students could produce a research project on where North London’s potable water comes from, both historically (The New River) and today (e.g. Thames Water, the George V reservoir in Enfield). https://londonist.com/london/features/where-s-my-tap-water-from</p>